

# A Description of a New Species of the Genus *Discothyrea* ROGER from the Ryukyus, Japan (Hymenoptera: Formicidae)

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**Abstract.** A new species of the genus *Discothyrea*, *D. kamiteta*, is described and illustrated from Okinawa-jima, the Ryukyus.

The ant genus *Discothyrea* ROGER is widely distributed in temperate and tropical zones of the globe, except for the Palearctic Region and Madagascar. There are 27 described species (BROWN, 1958a; BOLTON, 1995). *Discothyrea* species live in the ground layer of evergreen forests etc., and nest in decaying fallen trees, decaying stumps, or directly in the soil. They are said to eat arthropod eggs (BROWN, 1958b; MASUKO, 1981). Two species have been known to occur in Japan: one is named and the other is unnamed which is described herein.

## Genus *Discothyrea* ROGER

[Japanese name: Daruma-ari-zoku]

*Discothyrea* ROGER, 1863, Ber. Ent. Zeit., 7: 176.

Type species: *Discothyrea testacea* ROGER, 1863.

*Prodiscothyrea* WHEELER, 1916, Trans. R. Soc. S. Aust., 60: 33.

Type species: *Prodiscothyrea velutina* WHEELER, 1916 [Synonymized by Brown, 1958a.]

*Pseudosysphincta* ARNOLD, 1916, Ann. S. Afr., Mus., 14: 161.

Type species: *Pseudosysphincta poweri* ARNOLD, 1916 [Synonymized by Brown, 1958a.]

*Pseudosphincta*; WHEELER, 1922. Bull. Amer. Mus. Nat. Hist., 45: 645, 762 (laspus).

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**Diagnosis.** Small, stocky ants. Antenna 6-12 segmented (8 or 9 segments in Japanese species); apical segment large, longer than the other funicular segments together. Antennal scrobe developed. Eye relatively small. Sutures absent on thoracic dorsum. Gaster with first and second tergites swollen, and with posterior tip directed anteroventrally.

**Japanese species.** *D. sauteri* FOREL, *D. kamiteta* sp. nov.

*Discothyrea kamiteta* sp. nov.

[Japanese name: Medaka-daruma-ari]

(Figs. 1-3)

*Discothyrea* sp. 2: ONOYAMA & TERAYAMA, 1989, In MYRMECOL. SOC.

JAPAN (ed.), *A Guide for the Identification of Japanese Ants (I)*: 16.

**Diagnosis.** Total length of workers slightly greater than 2 mm. Body color reddish brown. Mandible covered by the protruding clypeal shelf. Antenna 9-segmented. Eye large, prominently protruding. Mesosoma 1.45 times as long as high in profile. Gastral tergites with distinct punctures that are moderately spaced.

**Description of holotype. Worker.** Head length 0.80 mm; head width 0.71 mm; scape length 0.50 mm; WEBER's length of mesosoma 0.80 mm; petiole height 0.38 mm; petiolar node length 0.23 mm; dorsal petiole width 0.70 mm; total body length 2.3 mm.

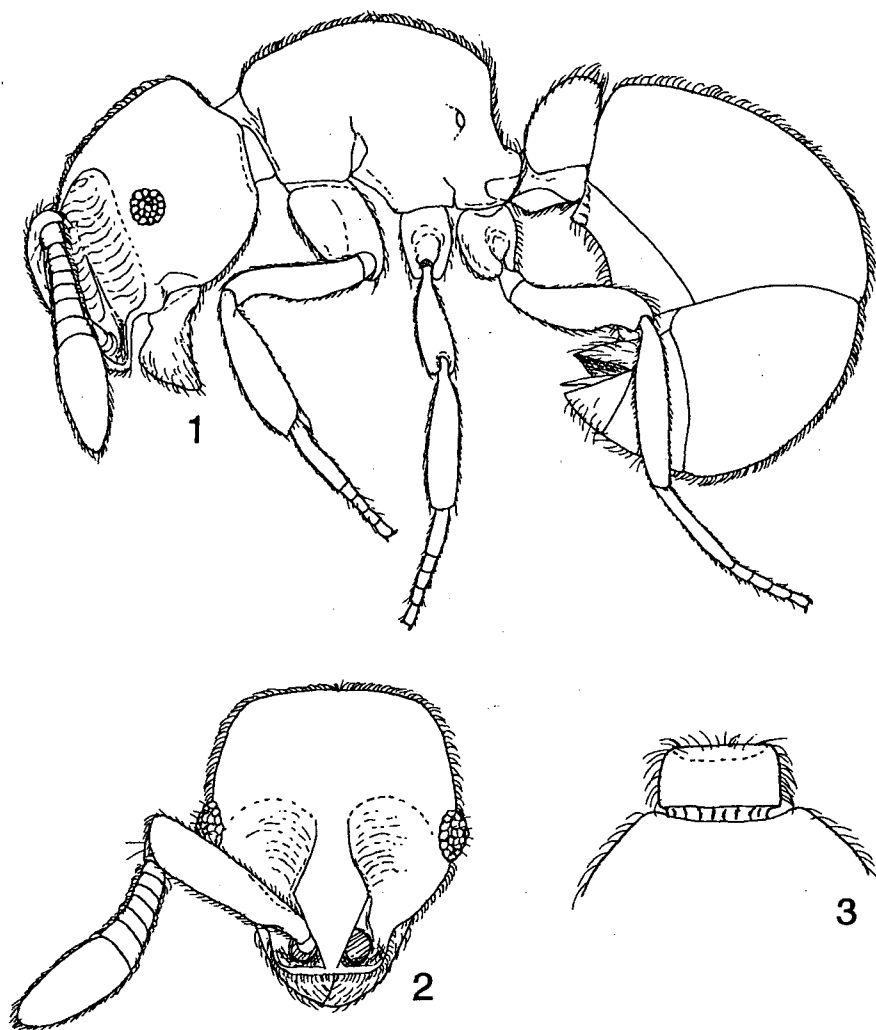
Head wider than long, 1.13 times as long as wide, with straight posterior margin. Mandible covered by the protruding clypeal shelf. Anterior margin of clypeal lobe straight. Antenna 9-segmented; scape 2.9 times as long as maximum width, basal 1/3 very weakly angulate; 2nd segment slightly wider than long; 3rd to 8th segments each distinctly wider than long; terminal segment large, 2.0 times as long as wide. Median lobe broadest at midlength, forming lateral dull angle; maximum width 3.3 times its width of anterior end, and 2.0 times its width of posterior end; posterior end of median lobe opened. Eye large, prominently protruding, with hairs.

Mesosoma high and short, 1.45 times as long as high, with relatively weakly convex dorsum in profile; posterodorsal corner of propodeum forming an obtuse angle.

Petiole high, 1.7 times as long as high, with strongly convex dorsal margin in profile; node in dorsal view rectangular, 0.5 times as long as wide, with parallel anterior and posterior margins; anterolateral corners forming an distinct angle. Subpetiolar process with convex ventral margin.

Head and mesosoma coarsely punctate; the punctures ca. 0.02-0.03

mm in diameter. propodeum coarsely punctate. First gastral tergite with distinct punctures that are moderately spaced; the punctures ca. 0.02 mm in diameter; interspaces microreticulate. Second and third gastral tergites microreticulate and impunctate. Antennal scape strongly microreticulate and impunctate.



Figs. 1-3. *Discothyrea kamiteta* sp. nov., worker. — 1, Body, profile; 2, head, full face view; 3, petiolar node, dorsal view.

Body including head covered with pubescences coarsely.

Body color reddish brown; legs yellowish brown.

**Holotype.** Worker, Yamada, Onna-son, Okinawa-jima, Okinawa Pref., 20. VIII. 1994, M. TERAYAMA leg.

**Paratypes.** 19 workers, same data as holotype.

**Type depository.** The Museum of Nature and Human Activities,

Sanda, Hyogo, Japan.

**Etymology.** The specific epithet is the Japanese noun kamiteta, which is the name of a god of sun appearing in an ancient mythology in the Ryukyus.

**Distribution.** The Ryukyus (Okinawa-jima I.).

**Remarks.** This species similar to *D. sauteri* FOREL, but a little larger, antenna 9-segmented, eye large and prominently protruding, mesosoma shorter and higher than in *sauteri*, punctures on gastral tergites deeper and more distinct, and spaces between punctures wider.

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